Network Working Group
Request for Comments #128
NIC #5844
Categories: C.2, D.
Obsoletes: none
Updates: none

J. Postel
21 April 71
UCLA
Computer Science

BYTES

It is somewhat unclear what to do with the Byte size parameter now allowed by the 2nd level protocol. I can conceive of an implementation in which the 3rd level programs never see this parameter. Crocker implies in RFC 123 that control of this parameter is to be given to the 3rd level programs and that both sender and receiver may specify values of the byte size to the NCP.

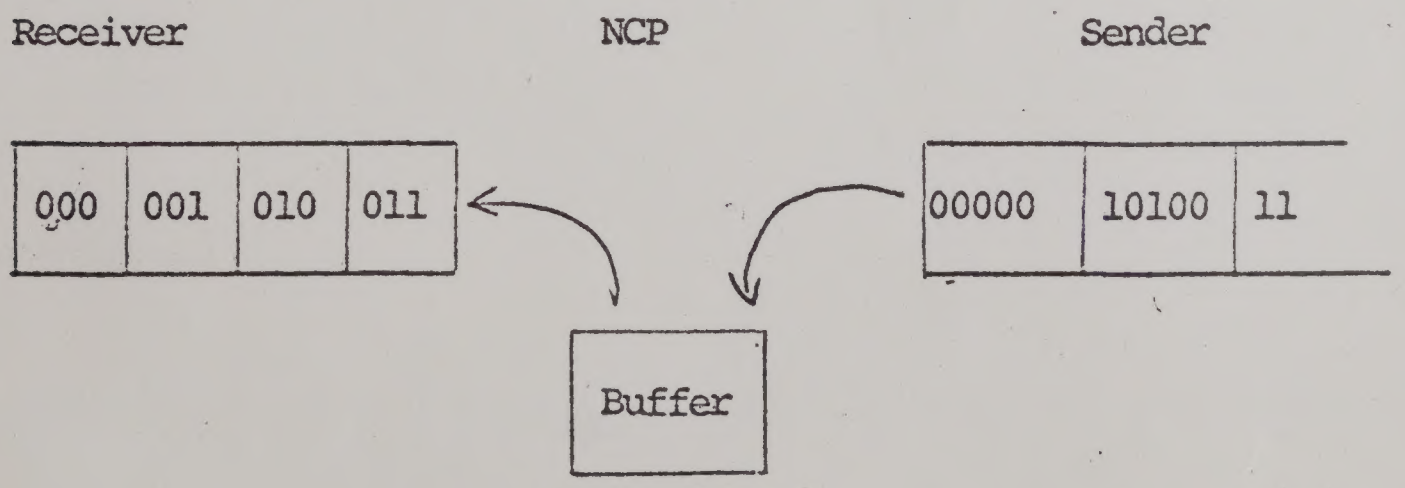
There are at least two interpretations if the sender and receiver specify different byte sizes.

I. The first is that the connection is illegal.

II. The second is that the NCP must parse the data stream on receipt from the network and into a buffer according to be byte size of the sender, and subsequently parse the data stream on transfer from the buffer to the receiver. In this second case there are two sub cases.

A. One is to consider bits as the basic unit.

For example, if the sender specified byte size = 5 and
the receive specified byte size = 3 then



B. The other is to consider bytes as the significant unit and pad (on the right or left?) or truncate to make things fit, or other transformation.

At UCLA--Computer Science we are contemplating allowing sender and receiver to specify different byte sizes and consider bits as the basic unit (Case II.A.). This does not rule out our considering the second subcase (II.B.). We may allow 3rd level programs to specify a library or user supplied routine to perform the transformation between sender and receiver bytes. Perhaps these transformation routines would be written in the Data Reconfiguration Language.